AMENDMENTS TO THE SPECIFICATION

Please amend the paragraph beginning on page 11, line 19 as follows:

A preferred embodiment of the present invention is now explained. Referring to Fig. 1, a preferred embodiment of the demodulator of the present invention includes a quadrature detecting unit 1, a quadrature controller 6, and an automatic amplitude controller (AGC) 2 in this order of signal flow, and further a feed back circuitry comprising an error detection unit 3, an amplitude error detection unit 4 and quadrature error detection unit 5. The quadrature detecting unit 1 is fed as an input signal with an intermediate frequency (IF IN) signal for quadrature-detecting the input signal to output an in-phase component Ich1 and a quadrature component Qch1. The quadrature controller 6 is fed with an in-phase component and a quadrature component output from the quadrature detecting unit 1 to correct the quadrature error based on quadrature error signal Qd. The automatic gain controller AGC 2 is fed with the in-phase and quadrature components Ich2, Qch2 output from the quadrature controller 6 to output signals, which are corrected for respective amplitude errors by in-phase and quadrature components Ai, Aq of the amplitude error, as in phase and quadrature components Ich3, Qch3 of the demodulated signal. The error detection unit 3 is fed with the in-phase and quadrature components Ich2, Qch3 of the demodulated signal output from the automatic gain controller 2, and detects and outputs an in-phase component and a polarity signal Ei, Di of the error signal and a quadrature component and a polarity signal Eq, Dq of the error signal. The amplitude ~~quadrature~~ error detection unit 4 outputs an in-phase component and a quadrature component Ai, Aq of the amplitude error to the automatic gain controller 2 based on a polarity signal Di of the in-phase component lch3 of the demodulated signal and the in-phase component Ei of the error signal, and on a polarity signal Dq of the quadrature component Qch3 of the demodulated signal and the quadrature component Eq of the error signal, Di, Dq, Ei and Eq being output by the error detection unit 3. The quadrature error detection unit 5 generates a quadrature error

signal Qd based on an in-phase component Ei and a polarity signal Di of the error signal and a quadrature component Eq and polarity signal Dq of the error signal, Ei, Di, Eq and Dq being output from the error detection unit 3, and outputs the quadrature error signal Qd to the quadrature controller 6. The quadrature error between phases of the in-phase component Ich and the quadrature component Qch generated at the time of modulation is corrected by the quadrature controller 6.